



National Aeronautics and Space Administration  
Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

# Inside Wallops

Volume XIX-99

Number 46

December 6, 1999

## ***NASA Wallops Researchers Receiving Technology Leadership Award***

Two researchers from the Wallops Flight Facility, Wallops Island, Va., are involved with two NASA Goddard Space Flight Center, Greenbelt, Md., projects that have been selected for the 1999 Government Technology Leadership Award sponsored by the Government Executive Magazine.

Dr. Steven R. Long and William Krabill, Observational Science Branch, are part the Hilbert-Huang Transform team and the Airborne Light Detection and Ranging (LIDAR) Topographic Mapping System team, respectively.

The award recognizes project teams that have directly aided in the missions of their organizations by boosting efficiency and effectiveness, lowering costs, and/or improving service to the public, through original uses of technology. Both of these new technologies are successfully being used by either a commercial enterprise or by a research institution.

The awards were presented at a ceremony at the Reagan International Trade Center, Washington, D.C., on Dec. 1, 1999. Additional details about the projects also will be included in a special supplement to the magazines' December issue.

The Hilbert-Huang Transformation Method, developed by NASA scientists, is a unique spectralanalysis method for analyzing nonlinear and nonstationary data and images.

The method enables better results and labor savings for diverse applications within such areas as: basic nonlinear mechanics, climate studies, earthquake engineering, geophysical exploration, submarine design, structural damage detection in bridges and buildings, satellite data analysis, blood pressure variations and heart arrhythmia.

NASA has filed four patents on the Hilbert-Huang Transformation Method. Over 60 universities and government agencies been granted access to the method through the NASA Space Act.

The Hilbert-Huang Transform team is represented by Long and Dr. Norden Huang of Goddard's Laboratory for Hydrospheric Processes.

The Airborne LIDAR Topographic Mapping System (ALTMS) provides unparalleled rapid, efficient and

accurate 3-D virtual mapping/monitoring of Earth features at significant time and monetary savings. This FAA-certified system provides information and capabilities that are impossible with traditional methods. It can operate in various lighting, weather and vegetation conditions and has absolute vertical accuracy of near one foot.

The ALTMS was developed jointly by NASA Goddard scientists, Houston Advanced Research Center and TerraPoint, LLC located in The Woodlands, Texas. This instrument was created to provide customers with readily available and affordable digital Earth surface data.

The ALTMS merges laser technology - which is digital, faster, less expensive and requires less processing than conventional technologies - global positioning, and mapping software into a miniaturized package that is mounted on light aircraft. Applications include vital projects such as flood plain mapping to develop emergency management and response plans, habitat/ecological characterization and preservation, shoreline/erosion surveys, mineral exploration and telecommunications site assessments.

Eleven team members represent the ALTMS team. The Goddard members include Krabill, George Alcorn, Geary Schwemmer, Jack Bufton, Patrick Coronado, Donald Friedman and Fran Stetina. Team members from Houston Advanced Research Center include John Hill, Terry Kunz and Don DiRosa. Team member Dan Cotter represented TerraPoint.

*All Hands  
with Arnold Torres*

*Dec. 9  
2:30 p.m.*

*Bldg. D-10, The Gym*

*Followed by an ISO Ice Cream Social in the Cafeteria. Please notify Sherry Kleckner, x1204 by noon, Tuesday, Dec. 7, if you plan to attend the Ice Cream Social.*

## ***Wallops Shorts***

### ***Balloon Launch***

A NASA scientific balloon was successfully launched from Esrange, Sweden on Nov. 19. The 4.0 million cubic foot balloon carried an upper atmosphere research experiment. Dr. William Brune of Penn State University was the principal investigator. Total flight time was 5 hours, 18 minutes.



*Scott Webb talks to Machipongo Middle School students.*

### ***Career Fair***

Betty Flowers, Public Affairs Office, and Scott Webb and Jay Savage, Wallops Information Systems and Advanced Technology Branch participated in a Career Fair at Machipongo Middle School on Dec. 1.

### ***Exhibit Opening***

Several Wallops employees attended the opening of the "Northern Light" exhibit at Union Station, Washington, D.C. on Dec. 1. The event was hosted by the Norwegian Ambassador to the United States and the Andoya (Norway) Rocket Range.

## ***General Dailey to Leave NASA***

Gen. John R. Dailey, Associate Deputy Administrator, will leave NASA to join the Smithsonian Institution's National Air & Space Museum (NASM). Gen. Dailey will be taking over as Director of NASM in January 2000.

Gen. Dailey came to NASA in 1992 following retirement after 36 years of service in the U.S. Marine Corps, most recently as Assistant Commandant. For the past seven years, Gen. Dailey has served as the NASA Administrator's most senior advisor and led the Agency's reinvention activities.

"The leadership provided by Jack Dailey has been unparalleled," Administrator Daniel Goldin said. "He has shaped and strengthened the Agency and was responsible for developing an infrastructure that will carry NASA into the new millennium. His commitment to aviation and space is unmatched."

## Do your part!



- Buy products with a high recyclable content, even if they cost a little more.

- Reuse what packaging you can and recycle the rest.

- When shopping, get one large shopping bag and put as much in it as you can tote.



- Take a reusable canvas tote bag with you when you shop.

- Buy quality products that last.

- Buy a special compost bin available at garden stores and nurseries to compost your food and yard scraps to use later in vegetable or flower gardens.



- Buy only the toxins (poison, paint, oil, solvent, automotive fluid, cleaners, herbicides, etc.) you need and use what you buy.

- Don't use disposal cameras. Less than half of them are ever actually recycled.

- Bag or box packing peanuts and bubble wrap. The Wallops Logistics Office will pick them up.

- Donate unwanted household goods to any of the organizations listed in the Yellow Pages such as the Foodbank, Goodwill Industries, Salvation Army, Lighthouse Ministries, or the Chincoteague Methodist Church Opportunity Shop. Save old eyeglasses. The Lion's Club collects them for the needy.

## From the Administrator

### Health & Safety Topic #5 Harmful Stress at Work

We live in dynamic times where science and technology provide great challenges, opportunities and threats. Many of these technological advances have been the result of the efforts of NASA and our dedicated employees.

Our desire to be world class leaders can cause a certain amount of productive stress in the workplace. This positive stress inspires us to do things that no other organizations can do and to succeed in inspiring our Nation and the world. But in some situations, the stress of overachieving can build to harmful levels. Instead of bringing out our best, it can negatively affect our performance. Even worse, studies by the Duke University School of Behavioral Medicine have shown a correlation between negative stress and physical illness.

You can find the full text of this message and previous messages at [http://www.nasa.gov/bios/health\\_messages.html](http://www.nasa.gov/bios/health_messages.html)

## Space Reserved for Mailing Labels



## The Library Corner

Employees can renew books on-line, request books on-line and receive overdue notices by e-mail. Follow the simple directions below for each of the procedures.

1. Go to the Library Homepage at: <http://library.gsfc.nasa.gov> and click on Wallops.

2. To Renew Books - Click on Resources, Library Catalog, then Renew Items (at bottom of page)

3. To Request Books - Click on Resources, then Book Request Form

4. To get Overdue Notices e-mailed to you, simply e-mail the Library at: [dall@library.gsfc.nasa.gov](mailto:dall@library.gsfc.nasa.gov) and request this service, including your e-mail address.

Although these new desktop services are meant to help you save valuable time, we still hope to see you in the Library. We have new books in monthly that are just waiting to be browsed.

Thank you all for using the new Wallops Library homepage and making it such a success! We hope you are finding the available websites and databases helpful in your research.

## Open Season for Federal Health Benefits

The 2000 FEHB Open Season continues through Monday, Dec. 13. During this time, eligible employees may elect to enroll or change health carriers. All open season changes will become effective Jan. 2, 2000, with premium deductions beginning Jan. 25, 2000.

## 1999 Combined Federal Campaign

by Tina Wessells, Chairperson

Thanks to NASA's federal and contractor employees for their generous support and contributions to this year's Combined Federal Campaign (CFC). The theme for this year, "Create Hope and Opportunity — Reach Out for Love" became a reality.

Total pledges amounted to \$20,941 for a 42% increase in contributions. Total participation increased by 23%. Through your generous contributions, many needs will be met for those less fortunate.

A special thanks goes to the CFC keyworkers for their time and effort in making the campaign a success.

## Government Issued Charge Cards

Tickets issued to civil service employees for official government travel will be charged to their individual government issued charge cards effective Dec. 1, 1999 (GSFC announcement 99-50, dated 10/4/99). The Government Travel Account (GTA) will be limited to invitational travelers and infrequent travelers, consistent with Public Law 105-264.

American Express, our travel service contractor, will automatically charge your airline ticket to your individual charge card for tickets issued after Dec. 1. Travelers will be responsible for vouchering airline ticket expenses on their travel voucher (Standard Form 1012). The airline ticket receipt must accompany your voucher.

Here are just a few other reminders that should help with the transition:

The Bank of America Master Card is for official government travel only and is to be used in accordance with travel regulations.

Travelers may not use their personal credit cards for airline tickets.

All reservations must be made and all tickets for airline service must be obtained through American Express in accordance with travel regulations.

Reservation changes and trip cancellations should be reported to American Express right away.

Travelers who have not yet signed up for the government travel charge card may do so by contacting Joan DeMarco, 66-5925 or Linda Layton, x1561. It takes about seven days from the date your application is submitted to receive a card.

## Mark Your Calendar



**Wallops Awards Ceremony followed by an Employee Open House -- Dec. 17.**

*Inside Wallops* is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees.

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